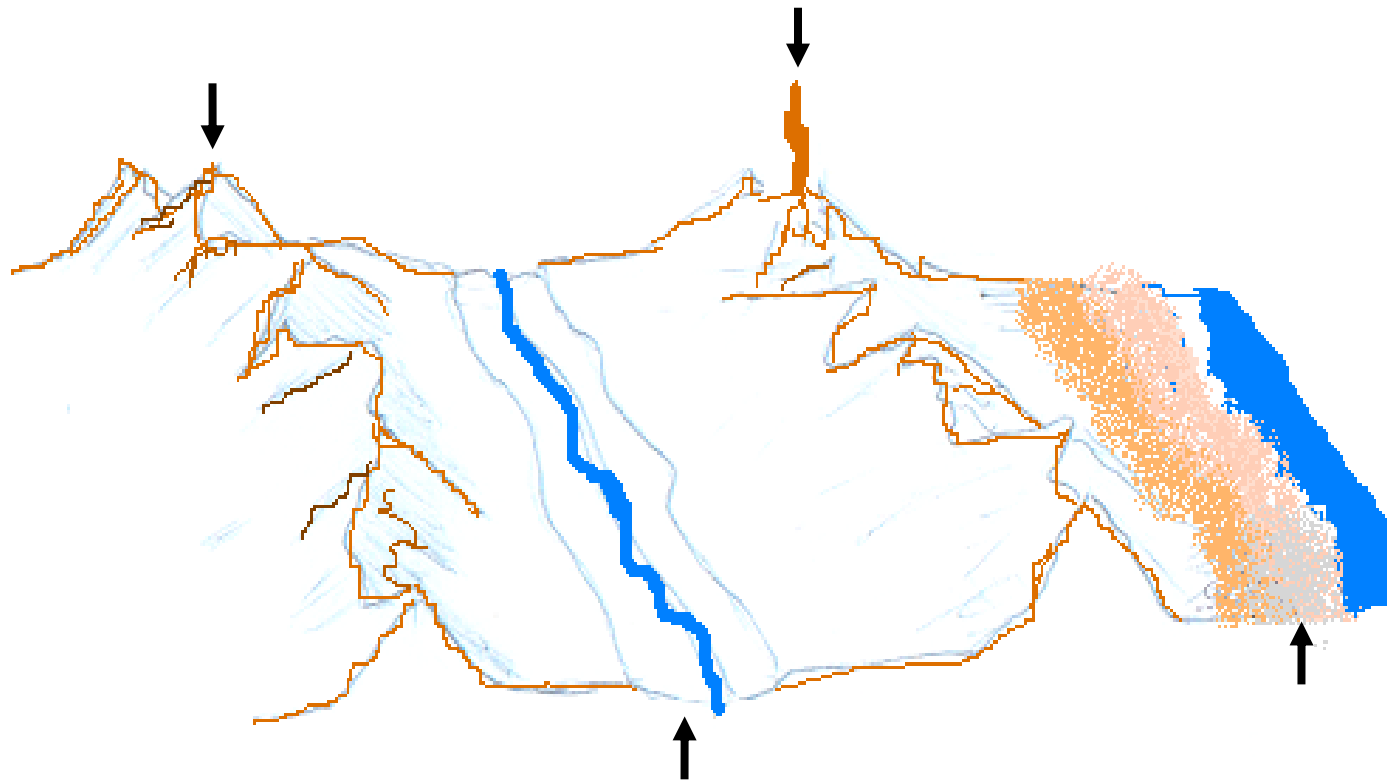


Explain the effect of weathering on the earth's surface.



Explain the effect of weathering on the earth's surface.

Demonstrate the power of ice with this experiment. Fill a small jar with water. Apply the lid. Place in a zipped plastic bag, then place that bag in a second plastic bag. (The plastic protects against broken glass.) Freeze.

Ice Wedging

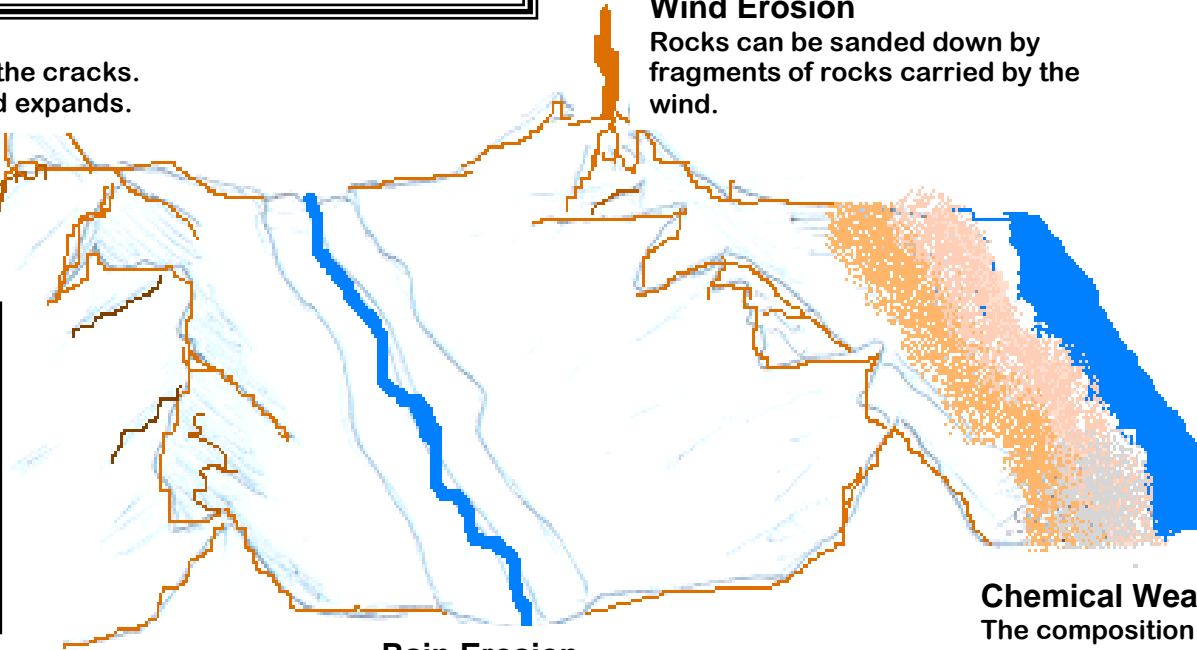
Water goes into the cracks.
Then freezes and expands.

Build a model out of sugar cubes and glue. Put it outside and take a picture. Leave it outside, and take a picture every few days. What causes the changes?

Wind Erosion

Rocks can be sanded down by fragments of rocks carried by the wind.

Visit an old cemetery to notice the effects of weathering on the tombstones. Compare stones that are new, 10 years, 20 years, 50 years, and 100 years.



Rain Erosion

Water washes away topsoil and enlarges river beds.

Chemical Weathering

The composition of rock changes due to natural or man-made chemicals. Often occurs where land and water meet.

Fill an empty 2 liter soda bottle with one cup of gravel, one cup of pebbles, one cup of sand, and cup of soil. Add water until it is 2/3 full. Lie on its side and watch as it settles. Experiment with the difference between gentle and rigorous agitation of

Place small pieces of steel wool in three different small zipped plastic bags. Add water to one, vinegar to another, and leave the third dry. Compare in 24 hours.

Geology 3 Information Pieces

Ice Wedging G-3
Wind Erosion G-3
Rain Erosion G-3
Chemical Weathering G-3
Water goes into the cracks. Then freezes and expands G-3
Rocks can be sanded down by fragments of rocks carried by the wind. G-3
Water washes away topsoil and enlarges river beds. G-3
The composition of rock changes due to natural or man- made chemicals. Often occurs where land and water meet. G-3

To Make Your MatchCard more durable:

- 1. Put the student MatchCard and instructor MatchCard back to back in a clear plastic page protector.*
- 2. Laminate the information pieces. Or you can make them sturdier by covering the paper with transparent tape prior to cutting the pieces out.*
- 3. For more ideas on how to use the MatchCards, and for keeping a notebook for review, see the Instructor's Guide.*